



**Dark Skies & Emerging Technologies:
Matching Supply & Demand through Innovation and Opportunity
High Country Conference Center – Flagstaff, AZ
August 19-20, 2014**

The Issue

There is a growing interest in the economic, scientific, and quality of life value of dark skies throughout the U.S., particularly in the Southwest, where higher elevations, clear skies, and lower humidity make night viewing more easily accessible. On the Colorado Plateau, vast areas of public lands have seen significant increases in outdoor recreational use. The area has become increasingly recognized as a world-class region for night sky viewing and tourism. In addition, lightless night skies are one of the most significant variables in the location of astronomical observatories. Their viability depends on continued reliance on dark sky conditions.

At the same time, cities, suburbs and communities in the Southwest have witnessed new development on their outskirts that has greatly expanded the use of large-footprint lighting systems. In addition, communities have responded to the need to provide safer and more sustainable street lighting. Public lands in remote parts of the Plateau have witnessed increased mining and oil and gas activity, which operates around the clock and requires extensive lighting. Against this backdrop, new lighting technologies have begun to emerge, as well as best practices for decision making affecting night sky resources in critical locations.

A Dark Skies Conference

In response to interest and debate around these issues, The Keystone Center is partnering with Lowell Observatory and the City of Flagstaff to convene a Dark Skies Conference, a forum in which a diverse group of participants can share their perspectives, experiences and interests related to dark skies preservation, discuss the associated economic and scientific dimensions, assess the potential of new lighting technologies, and explore best practices for meeting the challenges and achieving multiple goals. The conference is planned for August 19-20, 2014 in Flagstaff, AZ. The conference will be promoted through conventional media sources, targeted outreach to professional associations and listserves, and through social media.

Goals & Outcomes

The goal of the Conference is to raise awareness of dark skies issues, identify challenges and opportunities for meeting the need, explore practical solutions and their applicability in public and private settings, identify research opportunities, and map a course of action for a dark skies future. The Conference will serve first and foremost as a forum to share data and perspectives, explore issues related to dark skies from multiple perspectives and provide insight into ways these issues have been addressed in other regions through best practices in both the public and private sectors through lighting technology and use, incentives to improve lighting, facility siting to minimize lighting impacts, and model ordinances for retrofitting existing lighting and for new development. This cooperative information-sharing is essential to shared ownership of goals and provides a critical foundation from which to move toward actionable solutions intended to inform public

policies, best management practices, technological advancements, and local solutions. The Keystone Center will prepare a comprehensive report on findings and recommendations from the Conference.

Conference Participants

In order to ensure a robust and balanced set of perspectives, the conference will include representation from dark sky interests as well from economic and public interests in night sky lighting – and entities with ancillary interests in between. We will seek representation from:

- public land management agencies
- astronomical observatories
- biologists and ecologists
- outdoor recreation and tourism
- outdoor advertising industry
- lighting and optics industries
- extractive industries – mining, oil & gas
- state and local government
- commercial and residential developers
- tribal governments
- military base operations
- non-governmental organizations

Conference presenters and panelists will have specific knowledge of and experience with dark sky issues, challenges and opportunities.

Funding Need

The Keystone Center has received a generous \$10,000 gift from William Lowell Putnam to be used for initial assessment and outreach. In addition, the City of Flagstaff has tentatively committed to providing \$25,000 in conference planning and operation funds and \$10,000 in scholarship funds for attendees. We are seeking an additional \$45,000 through funders and sponsors to meet the funding need, including conference facilities, food and beverage, and materials. A portion of the costs of the conference will be recovered through registration fees.

Why Keystone?

The Keystone Center is an independent nonprofit organization that engages people and their ideas, informed by sound science, to understand and address complex environmental, energy, and public health challenges. We help resolve difficult issues, both current and emerging, by fostering an environment of trust and respect among leaders who wish to reach action-oriented, sustainable solutions that elevate individual interests in service of the greater good.

With nearly 40 years of experience in collaborative processes, The Keystone Center has a unique, proven ability to successfully bring together leaders with disparate interests to clearly define issues, take collective ownership of problems, and achieve common goals.

Contacts

Todd Bryan, Ph.D.
Senior Associate
The Keystone Center
tbryan@keystone.org
303-468-8864

Jeffrey Hall, Ph.D.
Director
Lowell Observatory
jch@lowell.edu
928-233-3202